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NJDHSS Communicable Disease Service Weekly Statewide Influenza Activity Summary

Week Ending March 10, 2006

Influenza level of activity: "REGIONAL ACTIVITY"

From September 20, 2005, to date 1,355 unique clinical specimens have been tested by the New Jersey Public Health and Environmental Laboratory and NJ clinical laboratories participating in the World Health Organization and National Respiratory and Enteric Virus Surveillance System*. What follows is a summary of culture-confirmed cases of influenza identified through testing performed by these laboratories for the week ending March 10, 2006:

- Number of influenza A culture confirmed cases: 88
- Number of influenza B culture confirmed cases: 3

This is the twenty-fourth week of the 2005-06-influenza season in New Jersey. For the second week in a row, the NJDHSS Communicable Disease Service was not notified of any respiratory outbreaks in any of the schools or health care institutions in the state, the number of influenza A culture positive isolates shows a minimal increase compared with last week, while influenza B culture positive isolates remain the same.

Rates of influenza-like illness (ILI) from nursing homes and emergency department visits are 0.94% and 5.01% respectively. The rate for school absenteeism is 5.37%. Hospital laboratory surveillance for respiratory syncytial virus (RSV) shows significant decrease in the number of tests performed and number of positives.

A few of the county percentage parameters showed figures well above the total average (see 07Mar06.pdf Table) but should not be interpreted as an increased level of activity since the denominator of reporting entities is very small.

Overall, this week's ILI surveillance parameter indicates a significant decrease in all aspects of the surveillance system, compared with last week's or the same period in previous seasons. In the next few weeks if this trend continues, the level of influenza activity in New Jersey might be lowered to "Local Activity" or "No Activity" marking the end of the 2005-2006 influenza season in the state of New Jersey.

Severe influenza associated pediatric Illness surveillance system:

The NJDHSS, Communicable Disease Service continues to monitor influenza associated severe illness and death in the pediatric population. To date, the NJDHSS Communicable Disease Service has not received any associated death report meeting the established criteria as stipulated in the surveillance protocol.

From the analysis of all data collected, and in line with the CDC protocol on level of activity duration, this week's level of influenza activity in the state of New Jersey remains at "REGIONAL ACTIVITY".

National weekly ILI surveillace report:

According to the CDC's latest influenza weekly activity level report for week 8 (February 19 – February 25, 2006), influenza activity increased in the United States. The proportion of patient visits to sentinel providers for influenza-like illness (ILI) was above the national baseline. The proportion of deaths attributed to pneumonia and influenza was below the baseline level. Twenty-one states and New York City reported widespread influenza activity; 14 states including New Jersey reported regional influenza activity; 10 states and the District of Columbia reported local influenza activity; 5 states and Puerto Rico reported sporadic influenza activity. For more information go to: http://www.cdc.gov/flu/

Influenza virus infection itself is not a clinical or laboratory reportable disease in New Jersey according to N.J.A.C. 8:57-1. Accordingly, activity levels must be extrapolated from weekly monitoring activities of healthcare facilities and providers dispersed around the state.

Avian flu WHO update:

The official report from WHO is that tests conducted at Germany's Friedrich-Loeffler-Institute for Animal Health have confirmed H5N1 avian influenza virus infection in a second mammalian species, the stone marten. This finding marks the first documented infection of this species with an avian influenza virus. Previously, H5N1 infection was confirmed in Germany in three domestic cats.

Nigeria's outbreak of highly pathogenic H5N1 avian influenza, initially confirmed at a single farm on February 8, has now spread to several parts of the country. To date, outbreaks have been detected on more than 130 farms in 11 of the country's 37 states. Continuing vigilance for human cases in Nigeria is essential. Virus isolated from poultry in Nigeria is genetically almost identical to viruses that recently caused fatal human cases in Turkey and Iraq. To date the cumulative number of laboratory-confirmed human cases of avian influenza A/(H5N1) reported to WHO stands at 176 including 97 deaths. WHO reports only laboratory confirmed cases. For more information go to: http://www.who.int/csr/disease/influenza/en/

Influenza Virus Vaccine Formulation For 2006-2007 Season:

FDA's Vaccines and Related Biological Products Advisory Committee (VRBPAC) met in Bethesda, Maryland, on February 17, 2006, to select the influenza virus strains

for the composition of the influenza vaccine for use in the 2006–2007 U.S. influenza season. During this meeting, the advisory panel reviewed and evaluated the surveillance data related to epidemiology and antigenic characteristics, serological responses to 2005/2006 vaccines, and the availability of candidate strains and reagents. The panel recommended that vaccines to be used in the 2006-2007 season in the U.S. contain the following:

- an A/New Caledonia/20/99 (H1N1)-like virus;
- an A/Wisconsin/67/2005 (H3N2)-like virus (A/Wisconsin/67/2005 and A/Hiroshima/52/2005strains);
- a B/Malaysia/2506/2004-like virus (B/Malaysia/2506/2004 and B/Ohio/1/2005 strains)

The influenza vaccine composition to be used in the 2006-2007 season in the U.S. is identical to that recommended by the World Health Organization on February 15, 2006.

*The laboratories conduct testing of pre-season isolates and the first isolates of the season. These isolates can provide information regarding circulating strains and information necessary for the vaccine formulation for the following year's flu season. Also, test results from representative samples collected during peak influenza activity late in the season, and after a major influenza outbreak, may identify new variants that are just beginning to circulate in the community, helping to inform vaccine formulations for the following year.

References and Resources:

- To obtain previous ILI reports: http://nj.gov/health/fluinfo/index.html
- http://www.nj.gov/health/flu/preventflu.shtml
- http://www.cdc.gov/flu/
- http://www.who.int/csr/disease/influenza/en/
- http://www.cdc.gov/mmwr/